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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,667	12/01/2000	Thomas R. Colligan	16356.567 (DC-02601)	2026
27683	7590	05/27/2005	EXAMINER	
HAYNES AND BOONE, LLP 901 MAIN STREET, SUITE 3100 DALLAS, TX 75202			CHUONG, TRUC T	
			ART UNIT	PAPER NUMBER
			2179	

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/727,667

Applicant(s)

COLLIGAN ET AL.

Examiner

Truc T Chuong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-10,12-18,20-24,30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-10,12-18,20-24,30 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is responsive to an Amendment, filed 02/22/05.

Claims 1-2, 4-10, 12-18, 20-24, and 30-31 are pending in this application. Claims 1, 9, 17, 30 and 31 are independent claims. In the Amendment, claims 1, 9, 17, 30, and 31 are amended; claims 3, 11, 19, and 25-29 are cancelled. This action is made final.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 8-10, 16-18, 24, and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Singer et al. (U.S. Patent No. 6,314,473 B1) in view of Funches et al. (U.S. Patent No. 5,305,160).

As to claims 1, 17, and 30-31, Singer teaches a method of providing acoustic management in a computer comprising:

receiving from a user instructions regarding a selected acoustic level via an interface (e.g., col. 6 lines 33-45, and figs. 4-8);

using an acoustic level bar and a computer input device for selecting a desired acoustic level (e.g., col. 6 line 33-col. 7 line 15, and figs. 4-8);

Singer teaches a percentage of a maximum possible acoustic level, the acoustic level selected (e.g., col. 6 line 33-col. 7 line 15, and figs. 4-8); however Singer does not teach a dial to indicate the levels. It is well known and would have been obvious to modify a digital level indicator to an analog dial indicator or vice versa to improve the visualization when working on different screen layouts;

Singer teaches adjusting an operational level of at least one subsystem of the computer to achieve the selected acoustic level (e.g., col. 3 line 65-col. 4 line 13, col. 6 line 33-col. 7 line 15, and figs. 4-8); and Singer also teaches a current system setting of a hard disk drive in the computer, the hard disk drive including a plurality of preset seek profiles, each having a known acoustic level (Preview mode may also be pre-set to execute automatically each time the GUI settings are altered, e.g., col. 8 lines 43-46 and fig. 4, it means the preview mode is pre-set to a certain level (threshold) on each disk drive based on the user previously defined, and the pre-set level will be saved/stored in the computer memory as the preset data file (profile) to be automatically run to compare the preset data and the current data each time the values in the computer system are changed); and Singer teaches making corresponding adjustments by at least one power management system in the computer (e.g., col. 7 line 62-col. 8 line 8, and figs. 4-8). However, the modified Singer does not teach performing a pre-test to determine current hard disk drive seek settings and current system settings. Funches clearly teaches pre-test a disk drive to determine the actual performance of each zone in a RAM (e.g., col. 9 lines 54-67), and calibration routine is initiated by a system microprocessor whenever the computer is turned on (e.g., col. 10 lines 1-15). It would have been obvious to a person of

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ordinary skill in the art at the time of the invention to have the pre-test and the calibration to the current system and the hard drive of Funches to the acoustic level control of Singer to allow an operator to easily control, adjust, and monitor the performance of a computer system.

As to dependent claims 2 and 18, Singer teaches the method of claim 1 further comprising:

subsequent to the adjusting, demonstrating to the user the selected acoustic level (e.g., col. 8 lines 1-20).

As to dependent claims 8 and 24, Singer teaches prior to the receiving, displaying a graphical user interface for enabling the user to select an acoustic level (e.g., col. 3 line 65-col. 4 line 13, col. 6 line 33-col. 7 line 15, and figs. 4-8).

As to claims 9-10, they are the equivalent system claims of method claims 1-2 respectively and are rejected under a similar rationale.

As to claim 16, it is the equivalent system claim of method claim 8 and is rejected under a similar rationale.

3. Claims 4-7, 12-15, and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Singer et al. (U.S. Patent No. 5,687,334) in view of Funches et al. (U.S. Patent No. 5,305,160), and further in view of Chari (U.S. Patent No. 6,046,742).

As to dependent claims 4 and 20, modified Singer teaches the adjusting an operational level of at least one subsystem or build-in components of the computer (note the rejection of claim 1 above); however, Singer does not clearly teach adjusting the speed of an internal fan of the computer system. Chari clearly shows that using of a GUI to adjust the speed of fans in the

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computer system (e.g., col. 13 lines 1-40 and figs. 17-18). It would have been obvious to a person of ordinary skill in the art at the time of the invention to be able to control the speed of fan of Chari in the modified Singer to provide fully control functionality of the fans in the computer system to save energy.

As to dependent claims 5 and 21, modified Singer in view of Chari teaches the adjusting an operational level of at least one subsystem of the computer comprises making corresponding adjustments to overall operation of a portion of the computer to maintain a heat production level of the computer at a level that can be managed by the internal fan operating at the adjusted speed (Chari, Temperature Sensors, col. 13 lines 38-60 and figs. 17-21).

As to dependent claims 6 and 22, modified Singer in view of Chari teaches the adjusting an operational level of at least one subsystem of the computer is performed using redefined power management levels of the computer (Chari, figs. 22-24).

As to dependent claims 7 and 23, modified Singer in view of Chari teaches the adjusting an operational level of at least one subsystem of the computer comprises adjusting a speed of a peripheral bus, with corresponding adjustments to a speed of at least one peripheral device connected to the peripheral bus (DIMM, figs. 15-16).

As to claims 12-15, they are the equivalent system claims of method claims 4-7 respectively and are rejected under a similar rationale.

Response to Arguments

4. Applicant's arguments filed 02/22/05 have been fully considered but they are not persuasive.

Applicants have argued and Examiner disagrees with the following reasons:

a. Singer does not perform to determine current seek settings and current system settings of a hard disk drive in the computer, the hard disk drive including a plurality of preset seek profiles, each having a known acoustic level.

Singer teaches, in col. 8 lines 43-46 and fig. 4, that the preview mode may also be pre-set to execute automatically each time the GUI settings are altered. It means the preview mode is pre-set to a certain level (threshold) on each disk drive based on the user previously defined, and the pre-set level will be saved/stored in the computer memory as the preset data file (profile) to be automatically run to compare the preset data and the current data each time the values in the computer system are changed.

b. Singer does not teach adjusting the power management system in the computer.

Singer teaches the power consumption of the computer system can be adjusted via a controller (col. 7 line 62-col. 8 line 8, and figs. 4-8).

c. Singer fails to teach "an acoustic bar and computer input device."

Singer uses the input device such as a computer mouse to manipulate the scroll bar as shown in figs. 4, 6 and 7 to adjust the noise levels and the power consumption levels (min. or max.) of the computer system.

d. The Examiner's combination arises solely from hindsight based on the invention without any showing of suggestion, incentive or motivation to combine.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any

judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971); and in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Singer, Funches, and Chari are in the same computer hardware field, which mainly deals with the power consumption, hard drive speed, cooling fan, etc., to coordinate the setup how to max the performance and min the cost of power consumption in order to help the user to feel more comfortable in long hours of using the system with less noise from the system hardware.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Truc T Chuong whose telephone number is 571-272-4134. The examiner can normally be reached on M-Th and alternate Fridays 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Truc T. Chuong

05/23/04


BA HUYNH
PRIMARY EXAMINER